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lesser weight must be permanently attached to the seat structure.

- (c) Fuel, oil, and coolant filler openings. The following apply:
- (1) Fuel filter openings must be marked at or near the filler cover with—
- (i) For reciprocating engine-powered airplanes—
 - (A) The word "Avgas"; and
 - (B) The minimum fuel grade.
- (ii) For turbine engine-powered airplanes—
 - (A) The words "Jet Fuel"; and
- (B) The permissible fuel designations, or references to the Airplane Flight Manual (AFM) for permissible fuel designations.
- (iii) For pressure fueling systems, the maximum permissible fueling supply pressure and the maximum permissible defueling pressure.
- (2) Oil filler openings must be marked at or near the filler cover with the word "Oil" and the permissible oil designations, or references to the Airplane Flight Manual (AFM) for permissible oil designations.
- (3) Coolant filler openings must be marked at or near the filler cover with the word "Coolant".
- (d) Emergency exit placards. Each placard and operating control for each emergency exit must be red. A placard must be near each emergency exit control and must clearly indicate the location of that exit and its method of operation.
- (e) The system voltage of each direct current installation must be clearly marked adjacent to its exernal power connection.

[Doc. No. 4080, 29 FR 17955, Dec. 18, 1964; as amended by Amdt. 23–21, 42 FR 15042, Mar. 17, 1977; Amdt. 23–23, 43 FR 50594, Oct. 30, 1978; Amdt. 23–45, 58 FR 42166, Aug. 6, 1993]

§ 23.1559 Operating limitations placard.

- (a) There must be a placard in clear view of the pilot stating—
- (1) That the airplane must be operated in accordance with the Airplane Flight Manual; and
- (2) The certification category of the airplane to which the placards apply.
- (b) For airplanes certificated in more than one category, there must be a placard in clear view of the pilot stat-

ing that other limitations are contained in the Airplane Flight Manual.

(c) There must be a placard in clear view of the pilot that specifies the kind of operations to which the operation of the airplane is limited or from which it is prohibited under §23.1525.

[Doc. No. 27807, 61 FR 5193, Feb. 9, 1996]

§23.1561 Safety equipment.

- (a) Safety equipment must be plainly marked as to method of operation.
- (b) Stowage provisions for required safety equipment must be marked for the benefit of occupants.

§23.1563 Airspeed placards.

There must be an airspeed placard in clear view of the pilot and as close as practicable to the airspeed indicator. This placard must list—

- (a) The operating maneuvering speed, $V_{\rm O}$; and
- (b) The maximum landing gear operating speed V_{LO} .
- (c) For reciprocating multiengine-powered airplanes of more than 6,000 pounds maximum weight, and turbine engine-powered airplanes, the maximum value of the minimum control speed, $V_{\rm MC}$ (one-engine-inoperative) determined under §23.149(b).

[Amdt. 23–7, 34 FR 13097, Aug. 13, 1969, as amended by Amdt. 23–45, 58 FR 42166, Aug. 6, 1993; Amdt. 23–50, 61 FR 5193, Feb. 9, 1996]

§23.1567 Flight maneuver placard.

- (a) For normal category airplanes, there must be a placard in front of and in clear view of the pilot stating: "No acrobatic maneuvers, including spins, approved."
- (b) For utility category airplanes, there must be—
- (1) A placard in clear view of the pilot stating: "Acrobatic maneuvers are limited to the following ——" (list approved maneuvers and the recommended entry speed for each); and
- (2) For those airplanes that do not meet the spin requirements for acrobatic category airplanes, an additional placard in clear view of the pilot stating: "Spins Prohibited."
- (c) For acrobatic category airplanes, there must be a placard in clear view of the pilot listing the approved acrobatic maneuvers and the recommended entry

airspeed for each. If inverted flight maneuvers are not approved, the placard must bear a notation to this effect.

- (d) For acrobatic category airplanes and utility category airplanes approved for spinning, there must be a placard in clear view of the pilot—
- (1) Listing the control actions for recovery from spinning maneuvers; and
- (2) Stating that recovery must be initiated when spiral characteristics appear, or after not more than six turns or not more than any greater number of turns for which the airplane has been certificated.

[Doc. No. 4080, 29 FR 17955, Dec. 18, 1964; 30 FR 258, Jan. 9, 1965, as amended by Amdt. 23–13, 37 FR 20023, Sept. 23, 1972; Amdt. 23–21, 43 FR 2319, Jan. 16, 1978; Amdt. 23–50, 61 FR 5193, Feb. 9, 1996]

AIRPLANE FLIGHT MANUAL AND APPROVED MANUAL MATERIAL

§23.1581 General.

- (a) Furnishing information. An Airplane Flight Manual must be furnished with each airplane, and it must contain the following:
- (1) Information required by $\S\S 23.1583$ through 23.1589.
- (2) Other information that is necessary for safe operation because of design, operating, or handling characteristics.
- (3) Further information necessary to comply with the relevant operating rules.
- (b) Approved information. (1) Except as provided in paragraph (b)(2) of this section, each part of the Airplane Flight Manual containing information prescribed in §§ 23.1583 through 23.1589 must be approved, segregated, identified and clearly distinguished from each unapproved part of that Airplane Flight Manual.
- (2) The requirements of paragraph (b)(1) of this section do not apply to reciprocating engine-powered airplanes of 6,000 pounds or less maximum weight, if the following is met:
- (i) Each part of the Airplane Flight Manual containing information prescribed in §23.1583 must be limited to such information, and must be approved, identified, and clearly distinguished from each other part of the Airplane Flight Manual.

- (ii) The information prescribed in §§ 23.1585 through 23.1589 must be determined in accordance with the applicable requirements of this part and presented in its entirety in a manner acceptable to the Administrator.
- (3) Each page of the Airplane Flight Manual containing information prescribed in this section must be of a type that is not easily erased, disfigured, or misplaced, and is capable of being inserted in a manual provided by the applicant, or in a folder, or in any other permanent binder.
- (c) The units used in the Airplane Flight Manual must be the same as those marked on the appropriate instruments and placards.
- (d) All Airplane Flight Manual operational airspeeds, unless otherwise specified, must be presented as indicated airspeeds.
- (e) Provision must be made for stowing the Airplane Flight Manual in a suitable fixed container which is readily accessible to the pilot.
- (f) Revisions and amendments. Each Airplane Flight Manual (AFM) must contain a means for recording the incorporation of revisions and amendments.

[Amdt. 23–21, 43 FR 2319, Jan. 16, 1978, as amended by Amdt. 23–34, 52 FR 1834, Jan. 15, 1987; Amdt. 23–45, 58 FR 42166, Aug. 6, 1993; Amdt. 23–50, 61 FR 5193, Feb. 9, 1996]

§23.1583 Operating limitations.

The Airplane Flight Manual must contain operating limitations determined under this part 23, including the following—

- (a) Airspeed limitations. The following information must be furnished:
- (1) Information necessary for the marking of the airspeed limits on the indicator as required in §23.1545, and the significance of each of those limits and of the color coding used on the indicator.
- (2) The speeds V_{MC} , V_{O} , V_{LE} , and V_{LO} , if established, and their significance.
- (3) In addition, for turbine powered commuter category airplanes—
- (i) The maximum operating limit speed, V_{MO}/M_{MO} and a statement that this speed must not be deliberately exceeded in any regime of flight (climb, cruise or descent) unless a higher speed